

What is claimed is:

1. A replaceable ink supply for removable insertion into a docked position within a docking bay of an ink-jet printer, the docking bay having a pump actuator and a fluid inlet coupled to a trailing tube for supplying ink to a movable print head, the replaceable ink supply comprising:
  - a reservoir for containing a quantity of ink, the reservoir defining a fill port into which ink may be introduced into the reservoir;
  - a sealing member for the fill port, the sealing member being selectively removable by a user to add ink to the reservoir;
  - a fluid outlet configured for establishing fluid communication with the fluid inlet when the ink supply is in the docked position; and
  - an ink pump in fluid communication with the reservoir and the fluid outlet, the ink pump actuable by the actuator when the ink supply is in the docked position to draw ink from the reservoir and supply the ink through the fluid outlet to the trailing tube.
2. The replaceable ink supply of claim 1 in which the reservoir is defined by a rigid frame extending from the chassis and at least one flexible wall attached to the rigid frame.
3. The replaceable ink supply of claim 2 in which the fill port is defined by the frame.
4. The replaceable ink supply of claim 1 wherein the sealing member is a plug that is press fit into the fill port.
5. The replaceable ink supply of claim 1 wherein the sealing member is a ball that is press fit into the fill port.
6. A method for refilling a replaceable ink supply configured for insertion into a docking bay of an ink-jet printer, the docking bay having a pump actuator and a fluid inlet coupled to a trailing tube for supplying ink to a moveable print head, the replaceable

ink supply including a pump portion actuatable by an actuator if the replaceable ink supply in a docked position in the docking bay, the method for refilling comprising:

removing a protective cap on the replaceable ink supply to expose a fill port for filling the replaceable ink supply with an initial quantity of ink;  
 removing a plug from the fill port;  
 refilling the replaceable ink supply with a quantity of refill ink; and  
 inserting a plug into the fill port to prevent ink leakage from the replaceable ink supply.

7. The method for refilling the replaceable ink supply of claim 6 further including replacing the protective cap.

8. The method for refilling the replaceable ink supply of claim 6 further including inserting the replaceable ink supply into a docked position in the docking bay to establish a fluid connection between the fluid inlet and the replaceable ink supply, the upon actuation by the actuator the replaceable ink supply provides refill ink through the fluid inlet to the moveable print head.

9. A replaceable pump module for use with an ink jet printer having a docking bay including a pump actuator and a fluid inlet fluidically coupled to a moveable print head, the pump module comprising:

a fluid inlet configured for connection to a fluid outlet associated with a supply of ink;

a fluid outlet configured for connection to the fluid inlet associated the docking bay; and

a pump in fluid communication with the fluid inlet and the fluid outlet associated with the replaceable pump module, the pump actuatable by the pump actuator to draw ink from the supply of ink and provide a pressurized supply the ink to the fluid inlet associated with the docking bay.

10. The replaceable pump module of claim 9 wherein the pump includes a variable volume chamber having a chamber volume, as the chamber volume is increased ink

is drawn into the variable volume chamber from the supply of ink and as the chamber volume is decreased ink is expelled from the variable volume chamber through the fluid outlet associated with the replaceable pump module.

- 5     11. The replaceable pump module of claim 9 wherein the fluid inlet, fluid outlet and pump is a plurality of fluid inlets, a plurality of fluid outlets and a plurality of pumps with each of the plurality of fluid inlets configured for connection to each of a plurality of corresponding supplies of ink and with each of the plurality of fluid outlets configured for connection to each of a corresponding plurality of fluid inlets  
10     associated with the each of the corresponding supplies of ink.
12. The replaceable pump module of claim 9 further including a first keying feature, the first keying feature interacting with corresponding keying features associated with the docking bay to ensure the replaceable pump module is properly positioned in the  
15     docking bay.
13. The replaceable pump module of claim 9 further including a first keying feature, the first keying feature interacting with corresponding keying features associated with the supply of ink to prevent incompatible ink from being supplied to the replaceable  
20     pump module.
14. The replaceable pump module of claim 9 further including a first keying feature, the first keying feature interacting with corresponding keying features associated with the supply of ink and a second keying feature, the second keying feature interacting  
25     with corresponding keying features associated with the docking bay to ensure the replaceable pump module is properly positioned in the docking bay.
15. The replaceable pump module of claim 9 further including an air purge apparatus for allowing for the removal of air trapped within the replaceable pump module.  
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16. The replaceable pump module of claim 15 wherein the air purge apparatus includes a septum valve allowing air to be removed from the air purge apparatus.

17. A replaceable ink container for use with a pump module for providing ink to an ink jet printing system, the ink jet printing system having a docking bay that includes a fluid inlet and an actuator, the replaceable pump module configured to interface with the fluid inlet and the actuator to provide ink to the docking bay, the replaceable pump module including a fluid inlet configured for connection to a supply of ink, the replaceable ink container comprising:
  - a fluid outlet configured for connection to the fluid inlet associated with the pump module; and
  - an ink reservoir for containing a quantity of ink, the ink reservoir in fluid communication with the fluid outlet, wherein with the pump module properly installed in the docking bay and the replaceable ink container properly installed in the pump module a supply of ink is provided from the replaceable ink container to the docking bay of the ink jet printing system.
18. The replaceable ink container of claim 17 wherein the actuator associated with the ink jet printing system has an actuated state and a non-actuated state and wherein the pump module provides a pressurized supply of ink to the printing the pump module
19. A method of providing ink to a printing system, the printing system including a first fluid inlet for receiving pressurized ink, the method comprising:
  - coupling a pump module to the first fluid inlet, the pump module including a second fluid inlet for receiving ink and a pressurizing apparatus for increasing the fluid pressure of the ink before providing the ink to the first fluid inlet; and
  - coupling an ink container to the second fluid inlet.
20. The method of claim 19, wherein the printing system includes a pump actuator and wherein the method further comprises actuating the pump actuator to move linearly to engage the pumping apparatus to provide pressurized ink at the first fluid inlet.